

1 ccgcacatcta gccgcccact cacacaaggc aggtgggtga ggaaatccag agttgccatg  
61 gagaaaattc cagtgtcago attcttgctc ctgtggccc ttcctacac tctggccaga  
121 gataccacag tcaaaccctgg agccaaaaag gacacaaaagg actctogacc caaactgccc  
181 cagaccctct ccagaggtt gggtgaccaa ctcatctggc ctcagacata tgaagaagct  
241 ctatataaat ccaagacaag caacaaaccc ttgatgatta ttcatcactt gatgagtgc  
301 ccacacagtc aagctttaaa gaaagtgtt gctgaaaata aagaaatcca gaaattggca  
361 gaggcgtttg tcctcctcaa tctggttat gaaacaactg acaaacacct ttctcctgat  
421 ggccagtagt tccccaggat tatgtttgtt gaccatctc tgacagttag agccgatattc  
481 actggaagat attcaaatcg tctctatgct tacgaacctg cagatacagc tctgttgctt  
541 gacaacatga agaaaagctc caagttgtg aagactgaat tgtaaagaaa aaaaatctcc  
601 aaggccttct gtctgtcagg ccttgagact tgaaaccaga agaagtgtga gaagactggc  
661 tagtgtggaa gcatagtgaa cacactgatt aggttatggg ttaatgttac aacaactatt  
721 ttttaagaaa aacaagttt agaaaatttg ttcaagtgt acatgtgtga aacaatatt  
781 gtatactacc atagtgagcc atgattttct aaaaaaaaaa ataaatgtt tgggggtgtt  
841 ctgttttctc caacttggc tttcacagt gtcgtttac caaataggat taaacacaca  
901 caaaatgctc aaggaaaggga caagaaaaa cccaaactag ttcaatgtat gaagaccaaa  
961 gaccaagttt tcatctcacc acaccacagg ttctacttag atgactgtaa gttagacacga  
1021 gcttaatcaa cagaagtatc aagccatgtg cttagcata aaagaatatt tagaaaaaca  
1081 tcccaagaaa atcacatcac taccttagt caactctggc caggaactct aaggtacaca  
1141 ctttcattta gtaattaaat tttagtcaga tttgccccaa cctaatgtct tcagggaaag  
1201 cctctggcaa gtagtttct ctttcagagg tctaatttag tagaaaggtc atccaaagaa  
1261 catctgcact cctgaacaca ccctgaagaa atccctggaa ttgaccctgt aatcgattt  
1321 tctgtcaagg tcctaaagta ctggagtgaa ataaattcag ccaacatgtg actaattgg  
1381 agaagagcaa agggtggta cgtgtttagt aggcagatgg agatcagagg ttacttaggt  
1441 ttaggaaacg tgaaaggctg tggcatcagg gttagggagc attctgccta acagaaatta  
1501 gaattgtgtg ttaatgtctt cactctatac ttaatctcac attcatataat atatggaaatt  
1561 cctctactgc ccagccccctc ctgatttctt tgccccctgg actatggtgc tgtatataat  
1621 gctttgcagt atctgttgct tgccttgatt aactttttt gataaaacct ttttgaaca  
1681 gaaaaaaaaa aaaaaaaaaa a

FIG. 1

1 MEKIPVSAFLLLVALSYTLARDTTVKPGAKKDTKDSRPL  
41 PQTLSRGWGDQLIWTQTYEEALYKSCTSINKPLMIHHLD  
81 CPHSQALKVFAENKEIQKLAEQFVLLNLVYETTDKHLSP  
121 DGQYVPRIMFVDPSLTVRADITGRYSNRLYAYEPADTALL  
161 LDNMKKALKLLKTEL

FIG. 2

FIG. 3

MEKFSVSAI<sub>1</sub>LLVAISGTLAKDTTVKSGAKKDPKDSRPKLPQTL<sub>2</sub>SRGWGDQLIWTQTYEEALYRS  
KTSNRPLMVI<sub>3</sub>HLDEC<sub>4</sub>PHSQALKKVFAEHKEI<sub>5</sub>QKLAEQFVLLNLVYETTDKHLSPDGQYVPRIVF  
VDPSLTVRADITGRYSNRLYAYEP<sub>6</sub>SDTALLYDNMKKALKLLKTEL

**FIG. 4**

1 cggcaaccct tgccggctcac acaaaggcagg agggaggaga gctcagattt gccatggaga  
61 aattttcagt ctcggcaatc ctgc<sub>1</sub>ttcttg tggccatctc tggta<sub>2</sub>ctctg gcca<sub>3</sub>aaagaca  
121 ccacagtcaa atctggatcc aaaaaggacc caaaggactc tcgac<sub>4</sub>cccaaa ctac<sub>5</sub>cccaga  
181 ccctgtccag aggttggga gatcagctca tctggactca gacttac<sub>6</sub>gaa gaagc<sub>7</sub>ttat  
241 acaa<sub>8</sub>atccaa gacaaggcaac agacc<sub>9</sub>ttga tggtcattca tcacttggac gaatgcccgc  
301 acagtcaagc tttaaagaaa gtgttgc<sub>10</sub>tg aaaaataagga gatccagaaa ttggcagagc  
361 agtttgc<sub>11</sub>t cctcaacttg atctatgaaa caactgacaa gcac<sub>12</sub>cttct cctgatggcc  
421 agtacgtccc cagaatttg<sub>13</sub>t ttgtggacc ctcc<sub>14</sub>ctgac ggtgagg<sub>15</sub>gca gacatcac<sub>16</sub>cg  
481 gaagataactc aaaccgtctc tacgcttac<sub>17</sub>g aacc<sub>18</sub>ttctga cacagctctg ctgcac<sub>19</sub>gaca  
541 acatgaagaa agctctcaag ttgctgaaga cagagt<sub>20</sub>tgta gagtcaactg tacagtgc<sub>21</sub>ct  
601 caggagccgg gaaggcagaa gcactgtgga cctgccc<sub>22</sub>atg acattac<sub>23</sub>agt ttaatgttac  
661 aacaaatgta tttttaaac acccacgtg<sub>24</sub>t gggaaaacaa tattattatc tactacagac  
721 acatgat<sub>25</sub>ttt ctagaaaata aagtcttgc<sub>26</sub>tg agaactcc

**FIG. 5**

MEKFSVSAI<sub>1</sub>LLVAISGTLAKDTTVKSGSKKDPKDSRPKLPQTLSRGWGDQLIWTQTYEEALYKS  
KTSNRPLMVI<sub>2</sub>HLDEC<sub>3</sub>PHSQALKVFAENKEI<sub>4</sub>QKLAEQFVLLNLIYETTDKHLSPDGQYVPRIVF  
VDPSLT<sub>5</sub>VRADITGRYSNRLYAYEPSDT<sub>6</sub>ALLHDNMKKALKLLKTEL

**FIG. 6**

1 AACCCCTAGTT ACCTCACACC AAGACAGATA TGCCAAAGAT TCCACAGCCT  
51 CAATAGCATG TGTAGGATAT CTGCTAATAA TTACCTCCTC CTTGCCATCC  
101 GTCAGCCACT ATGACAAACT CTGGGTTTTT CCTGACATGA GATTAGGCAC  
151 ATGAGTATAG AATAATTATA TCACTATAAT TAACTGTAAC AAATCAAAGA  
201 CTTTTTTTT TAAGTTCCGG AGTATGTGTG TAGGATGTGC AGGTTTGTTC  
251 CATCAGTAAA CGTGTGCCAT GGTGGTTGC TGCACTGATC AACCCAACAA  
301 CTAGGTCTTA AGCCAGCCTG CATTAGCTAC TTTTATCAAA TGTTATGGC  
351 TGAATTGTGT CCCCCCCAAA AATTCATATG TTGAAGTCTT AATCCCCAGG  
401 ACTTCAGAAT AGGATCTTTA CAGAGGTAAT TAAGTTAAAG TAGGTCATTA  
451 GGCAGGACCC AAATACAATA TGACTGGTGT CCTTATAAAGA AAAGGAAAAAA  
501 AATGACACAG ACAGGTACAG AGGGAAAAAC CATGTGGCAA TACAGGGAAA  
551 AGTCATTTAA TATTCAAAAT GGTCCCATAT GTTAATATTA TCCCCATATT  
601 ATAGATGGAG AAACTGAAGT TTTGGGGATG TTAAATGAGA TCTCAGATCA  
651 TCCTATGAGC AAGCACCAAGG ATGCAGGATT CAGATGGAA TCTCGTGA  
701 CCAAATCCCA TCCACTTGTG ACTTTCAGTG GATAAGGGAC TGAAGGACTT  
751 TGGTCCCAAC TCTGCCCTAA ACTAGTTGTG AGACCTCAA AAAGTTATGA  
801 ATTTTTGCC ATCTTCATTT ATTCACTCTGT AAAATGAAAG ACTGGAATTG  
851 AATATTACAA GGGTCTATCT AAGGGCCTGC TAGTTTAAG ATTTTGCTC  
901 AAATCATCGT TTTCAAACTC CTGAAGAAAT TACTTCTATA AATTCAATTAG  
951 AATTGAAAGG AAATTCAAGTA TTTGGAGAAT CACGATTTG CCCACAGAAAT  
1001 TCAAGGATT ATTGGAAAAA TATACATACT TGCAAATGTT TTTGAAATAT  
1051 TATGACCTTA ACTCATTAA AAAAGTCATT TATATAGGGC TTGCATCCCA  
1101 TTCATTAAC TCTGTGTT AACATTTCT TCATTCTGAG CTTTAAAGA  
1151 CTGCACACAA CTTCATGAAC AAAATACAGG ATTAAAATTT TCTGACAGAA  
1201 AATTAAATT CCAGTTTAA AATCTTCAGG GAGTAATTAA ATGGTCTTGA  
1251 GGGGAAAAAA AACTGGTTG CAGACCTTAG TTTTAGGTC TGAGAAAATG

1301 GAGTAAATGG CTTCCTGCTT GCGTGGCAGG AAAGTTGCC TTTAAATAAG  
1351 AGATTATCTG TGAAATACCT TTGAACCTCTG TGGAGGGAAG TTGCTGCATA  
1401 CATTCAATGG CAAGGCATTT ATTACAAGCT CACGATATTA GGCTGTTTT  
1451 TTTTTTTTT TTGCCAATAC TTCCTCAGTT TTGAAAAATT ACGTGGGTTA  
1501 CTTGATTTGT ATTTTTTTTC ATACCTGTAG AAGTTAGGGT GCATTGTTT  
1551 GACAGGAGCA GGGAAAGTATT GTAGAAAATA ATTTTATCA TAATGGAGTA  
1601 TGGCAGGTTA TATGACTGCG AGGATCAGAA TTGTGAATCA TCTCTTGTGT  
1651 GTCTTCAAGT AAATAAAGGC AATCTGCCA CGGAGCAGAA AAAAAATCTA  
1701 CAAACTACAA ACTCTGTCCA ATCATGTAAA GACAAATCAG CCTTCAGGCA  
1751 AATCAAATGT CTTCAATTCAA AGTCTACCTG GATTTGGCAC TCTGCCATC  
1801 GTTCAAAAC CTCTTAACAA TACGTTTCAC AAATAGTTAA AACATGCAT  
1851 ACTGAAAAGC ATACTTTGC AATGTTATTT TTAAAAACAA GGAACCTCTT  
1901 AACCCAGGGA AGATAATCAC TTGGGGAAAG GAAGGTTCGT TTCTGAGTTA  
1951 GCAACAAAGTA AATGCAGCAC TGGTGGGTGG GATTGAGGTG TGCCCTGGTG  
2001 CATAAAATAGA GACTCAGCTG TGCTGGCACA CTCAGAAGCT TGGACCGCAT

**FIG. 7**

1 AAAGGTCTAG AAAGAACCT TTTAAATGAG TGAACCTTAC CATAACCTAGA  
51 AATGCTGTGG GCTAGTGACT CTTGAAATAA CTCCATTGTC TTATGCTTCT  
101 AAAAGGTCTA CAGAGACCAT TTTTTAAAAA GATGATTGAT TAAAAAAAAC  
151 TGATTTGAGG TAAAAACCTT AACTAGAATT GCTCTCACAT ATCTAAATAT  
201 CACTATTTAG CCTTTAGTTC TATTCAAACC ATTATTTAC AGATTAGAAA  
251 CACCAAACAA ACGATTAAGC AAACAAAAAT AGAACAGTCA ATAGTTTCT  
301 AAAGGCCCTA CAATTAGTTG AGGGCAGAGC TAGGAGGAAA GCCAGGGCTC  
351 TTCTACTCCA CTATCTTAGG CATTGGGAAA TGGGTGGGAT TTTCGGGTCAA  
401 TTACAGTCAG CATCCTGCTT CCACACTCTG GATGATGATA TCAGAGGTGA  
451 CACTGAACAC CCTGAAACTT TAGTTCCAC GCCTGTAACA GAGTTCCATG  
501 CAACAGTTCA GAGCGACATA GTCGTGAACA TAGAGTGAAC TGAGGAAGAG  
551 GAAGAGGCTT GGGATGAACG TAGGGTCCCT GCTTCCACAG GAACAGGACA  
601 GCCTGGGAGG CTGAAGCATC GGCGATTAC CTTCGCTCAA CCTGGAGGC  
651 TCCACACAGA CCATTGATGT GTCAGCAGCG TTAGGTTCTT CTCTTCTTGG  
701 CCTGTAGATG AAGTCATTAT GTGCCTGTGT CTCTGACCTA AGTTTCTTTC  
751 CTATGAGAAT AACAGTCATA TTAGATTAGA ACCCAGTCTA ATGACCTATT  
801 TCACTTACTT TAAATTCTT ATTCAATTAT TTCAATTACT TTCAATTATT  
851 TTACTTACTG TGGTACTTAG AATCAAATTC AGAGCCTTGC ACATACTTAA  
901 CAAATGCTTA ATCTCTCTT AAGACCCTCT CTCTGTGTAT GATCATCTGA  
951 TGAGGTCTG GGAATTACAG CACATGGATT CCTTTAAAAC ACATCTAAC  
1001 CATAACCTCTT GGTAATTAAA AACATCTCTA ATTTGCTGTA ATTCACTATA  
1051 ATGATATAAC AGCTATCCTG GAGTATTCTT GTGTCTAATT TCATGCTGGT  
1101 AAAGCTCTGG TTATGGTACA ACAAAAGATGA GGTAAATTATT ACAACATCCT  
1151 GCACATACTG GGGTATCTGT GGCATCCTTG GTACATCAGT CCTGAAACGA  
1201 AGCCAATATC TACAGTAGCT TTGAGATGCG TAGGCGAGGG TAAATTCTTT  
1251 ATGCTACTGA GGTGGTACTG TGTGGTCATT CTTGTGATC TCCTGATGTT  
1301 GCGATGCACA CCCACAAACA CACATTGTA CACATATATT AATCATCAGG

1351 GCCATTATTA GCTCACAAACA TTATCCTATC CTTCTTCT TCAATAACCT  
1401 CTCCGAGTTT GAAGAGTCCA TGGCGATGAT TTGCGGGGTT TATACCTGTG  
1451 ATTAAAGCGC ACACAAAAAA TGATATTGTG GAAAATAACA TGTCTGTGA  
1501 TCGAGCATGG CCAGCTGTAT AACTGTAAGA AGGATTAGAA CTGTGAATCA  
1551 TCCTTAAGAA AAAAAAAAAG AAAAAAAAAG CTAAATAAAT GCAATCTGCC  
1601 CAAGAGGGAG GAAATGAATA CCTATAAACCC ACAACTTCTA TCCAATCACA  
1651 TACAGACAAA TCAGCCTTCA GACCAATCAA ACGTCTTCAT TTAAAGCTTA  
1701 CCTGGACTTG GCATACTGCC CAGCTTTCC AAAACTACTC ACAATAATAC  
1751 CTTCAACAAAC AGTTAAAAAA CGCTGGTACT CAAACAAAAT CAACAGCCTT  
1801 TTCAACGACT GCTTAAAAAA AGACCAAACA AACAAACAAG GAACGTCTTA  
1851 ACCCAGAGAA GACAATTGCT TGGGAGAGGA AAAGTTGCT TCTGAGTTAG  
1901 CAGCCTGTGG AAACAGGATT AGTGGGTGGG ATTGGGGTGT GCTCTGCCA  
1951 TAAATACAGG CTCAGCGCTG CGCTGGCACA CTGAGAAACT TGGACGGCAA  
2001 CCCTTGCAGGC TCACACAAAG CAGGAGGGTG GGAAGCCAG GTAAGGCAAT

**FIG. 8**